

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1 (currently amended): A water heater, comprising:

2 a heat source[[,]];

3 ~~heat exchange means for heating supplied water, and electrolytic water generating means,~~

4 ~~wherein a removing operation of scale having salt as main ingredient deposited in a water pipe of~~

5 ~~said heat exchange means is carried out using produced water of said electrolytic water generating~~

6 ~~means~~

7 heat exchange means for receiving water, heating the received water, and supplying the

8 heated water, said heat exchange means including a water pipe; and

9 electrolytic water generating means for generating acid water and alkali water,

10 wherein if a hot water supplying operation time exceeds a preset value, a removing operation

11 of scale having salt as a main ingredient adhered to a water pipe of said heat exchange means is

12 performed for a predetermined time using the acid water produced by said electrolytic water

13 generating means while the hot water supplying operation is stopped.

1 Claim 2 (currently amended): The water heater according to claim 1, wherein ~~acid water~~

2 ~~which is one of the produced water of said heat exchange means is used in deposited salt removing~~

3 ~~processing for removing salt deposited in the water pipe of said heat exchange means, the water used~~
4 ~~in this processing is mixed with alkali water which is the other water of the produced water and~~
5 ~~discharged out~~

6 the acid water flowing out from said water pipe of said heat exchange means is mixed with
7 the alkali water generated by said electrolytic water generating means and discharged out.

1 Claim 3 (currently amended): A water heater, comprising:

2 a heat source[[,]];

3 ion exchange means for removing at least basic positive ion from received water; in supplied
4 ~~water, heat exchange means for heating water after the basic positive ion is removed, and electrolytic~~
5 ~~water generating means, wherein a regenerating operation of said ion exchange means is carried out~~
6 ~~using produced water of said electrolytic water generating means~~

7 heat exchange means for heating water after the basic positive ion is removed; and

8 electrolytic water generating means for generating acid water and alkali water,

9 wherein if a hot water supplying operation exceeds a preset value, a regenerating operation
10 of said ion exchange means is performed for a predetermined time using the acid water produced by
11 said electrolytic water generating means while the hot water supplying operation is stopped.

1 Claim 4 (currently amended): The water heater according to claim 3, wherein

2 said ion exchange means includes positive ion removing means for removing positive ion

3 and negative ion removing means for removing negative ion,

4 the acid water produced by said electrolytic water generating means is used for regenerating
5 processing of said positive ion removing means,

6 the alkali water produced by said electrolytic water generating means is used for regenerating
7 processing of said negative ion removing means,

8 ~~both the former water and later water~~ the acid water and the alkali water are mixed and
9 discharged out.

Claim 5 (canceled).

1 Claim 6 (currently amended): The water heater according to claim 1, wherein
2 ~~before the hot water supplying operation is carried out or when the temperature of said heat~~
3 ~~exchange means is low, salt deposited in a water pipe of said heat exchange means is removed~~
4 before said heat exchange means supplies the heated water or when the temperature of said
5 heat exchange means is low, deposited salt is removed.

1 Claim 7 (currently amended): The water heater according to any one of claims 1 to 4,
2 wherein
3 ~~the supplied water is heated to~~ the heated water supplied by said heat exchange means is
4 70°C or higher.

U.S. Patent Application Serial No. **10/728,883**
Amendment filed September 21, 2006
Reply to OA dated June 23, 2006

1 Claim 8 (original): The water heater according to any one of claims 1 to 4, wherein
2 said heat source is a vapor compression type heat pump.

1 Claim 9 (original): The water heater according to claim 8, wherein
2 carbon dioxide is used as a refrigerant of said vapor compression type heat pump.